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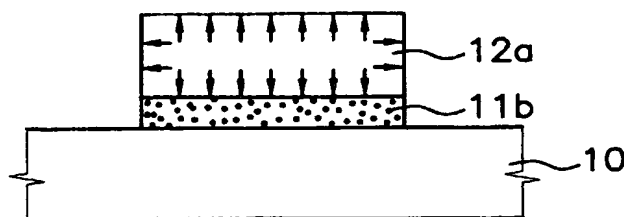
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(54) Title: TFT SUBSTRATE FOR LIQUID CRYSTAL DISPLAY APPARATUS AND METHOD OF MANUFACTURING THE SAME



(57) Abstract: There are provided a TFT substrate for an LCD apparatus and a method of manufacturing the same. A substrate (10), a diffusion barrier layer (11) and a copper alloy layer (12) are formed on the TFT substrate, consecutively. The copper alloy includes a material from about 0.5at% to about 15at% to form a gate wiring layer. The material is used to form the diffusion barrier layer (11). A compound that comprises a material such as Zr, Ti, Hf, V, Ta, Ni, Cr, Nb, Co, Mn, Mo, W, Rh, Pd, Pt, etc. is deposited on the diffusion barrier layer (11) to a thickness from about 50Å to about

5,000Å. The deposited compound is then heat treated to convert the deposited compound into a silicide compound (11b). The transistor substrate has low resistance and high conductance. Also, etching process is simplified, and a mutual diffusion is prevented by means of the thin diffusion barrier layer.

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